

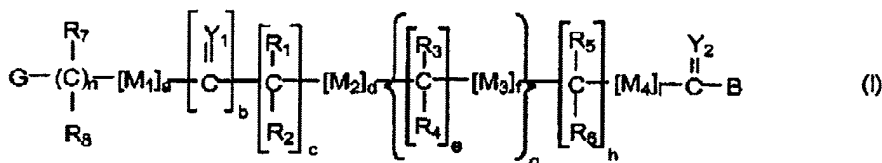
09/823,283

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (Currently amended) A compound comprising the formula:



wherein:

G is a linear or branched polymer residue;

Y₁ and Y₂ are independently O, S, or NR₉;

M₁-M₃ are independently O, S, or NR₁₀;

M₄ is X or Q;

wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from C(=Y₂);

B is a residue of an amine-containing moiety or a residue of a hydroxyl-containing moiety;

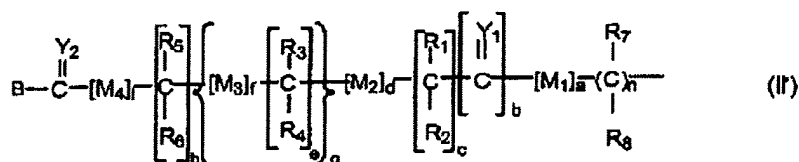
R₁₋₁₀ are independently selected from the group consisting of hydrogen, C₁₋₆ alkyls, C₃₋₁₂ branched alkyls, C₃₋₈ cycloalkyls, C₁₋₆ substituted alkyls, C₃₋₈ substituted cycloalkyls, aryls, substituted aryls, aralkyls, C₁₋₆ heteroalkyls and substituted C₁₋₆ heteroalkyls;

a, b, c, d, [e, f, g,] h, i and n are each independently zero or a positive integer; and

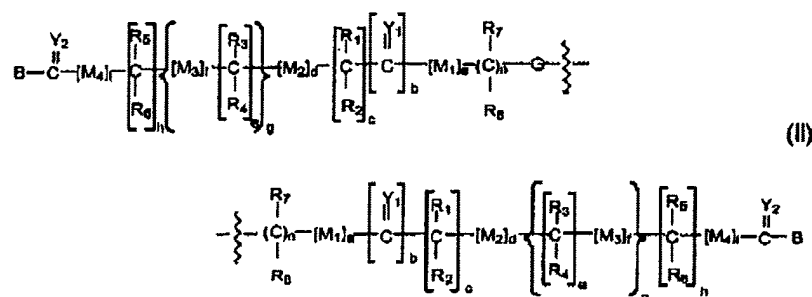
e, f and g are each independently a positive integer.

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2. (Original) The compound of claim 1, wherein G includes a capping group A, selected from the group consisting of hydrogen, CO₂H, C₁₋₆ alkyl moieties, and



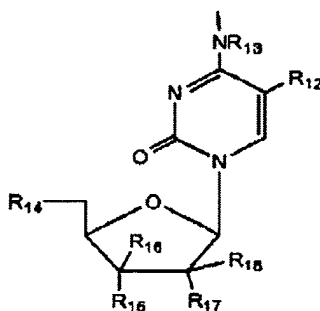
3. (Original) A compound of claim 2, of the formula:



4. (Currently amended) The compound of claim 1, wherein *a*, *b*, *c*, *d*, [*e*, *f*, *g*,] *h*, *i* and *n* are independently zero, one or two.

5. (Original) The compound of claim 1, wherein Y₁ and Y₂ are both O.
6. (Original) The compound of claim 1, wherein M₂ is NH and *d* is one.
7. (Original) The compound of claim 1, wherein R₇ and R₈ are both H.
8. (Original) The compound of claim 1, wherein *n* is 1.
9. (Original) The compound of claim 1, wherein *a* is 0.

10. (Original) The compound of claim 1, wherein a is 1.
11. (Original) The compound of claim 1, wherein c is 0.
12. (Original) The compound of claim 1, wherein g is 2, M_3 is O, e is 2, f is 1 and R_3 and R_4 are H.
13. (Original) The compound of claim 12, wherein b , d , h and n are 1, R_5 and R_6 are H and M_2 is NH.
14. (Original) The compound of claim 12, wherein b , d and n are 1, M_2 is NH and R_3 and R_4 are H.
15. (Original) The compound of claim 1, wherein B is a residue of an amine - containing moiety.
16. (Original) The compound of claim 15, wherein said amine-containing moiety is



wherein

R_{12-13} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8} substituted cycloalkyls, aryls, halo, substituted aryls, aralkyls, C_{1-6} heteroalkyls, substituted C_{1-6} heteroalkyls;

R_{14-18} are independently selected from alkoxy, e.g. OR_{19} or, in the alternative, H, OH, N_3 , NHR_{20} , NO_2 or CN, fluoro, chloro, bromo, iodo, where R_{19-20} are independently selected from

the same group which defines R_{12-13} .

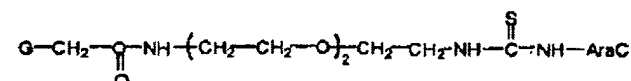
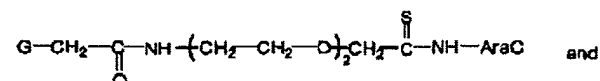
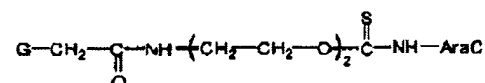
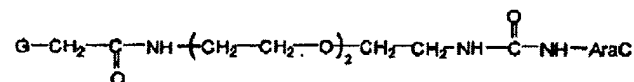
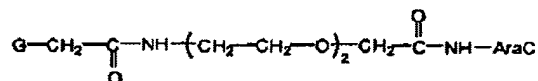
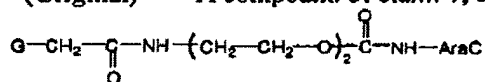
17. (Original) The compound of claim 1, wherein G is $O-(CH_2CH_2O)_x$ or $O-(CH(CH_3)CH_2O)_x$, wherein x is the degree of polymerization.

18. (Original) The compound of claim 17, wherein G is $O-(CH_2CH_2O)_x$ and x is a positive integer selected so that the weight average molecular weight is at least about 20,000.

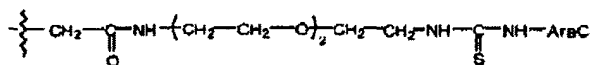
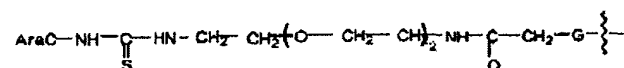
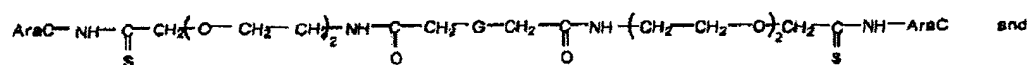
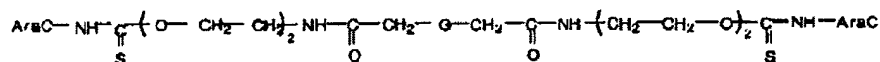
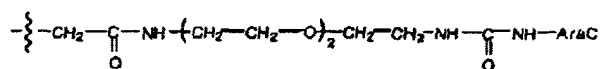
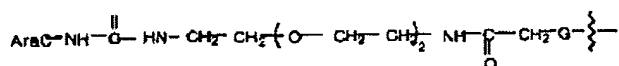
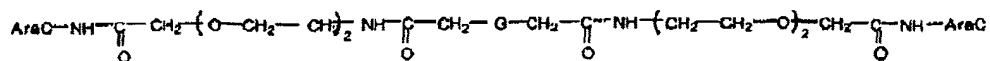
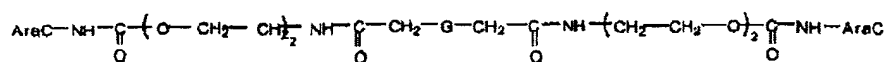
19. (Original) The compound of claim 18, wherein G has a weight average molecular weight of from about 20,000 to about 100,000.

20. (Original) The compound of claim 21, wherein G has a weight average molecular weight of from about 25,000 to about 60,000.

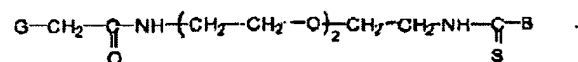
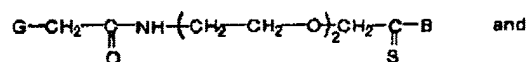
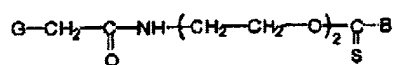
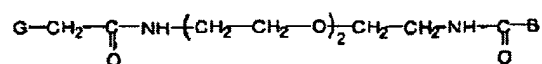
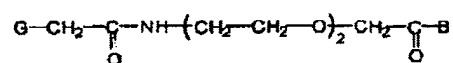
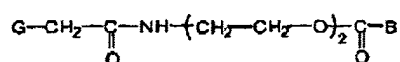
21. (Original) A compound of claim 1, selected from the group consisting of:



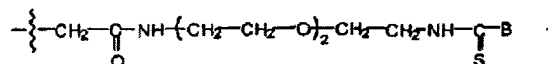
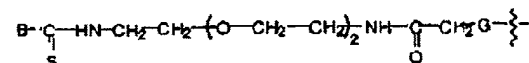
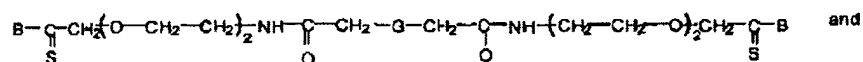
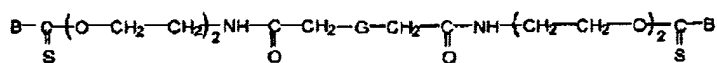
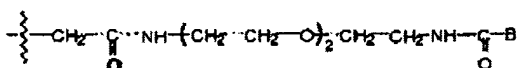
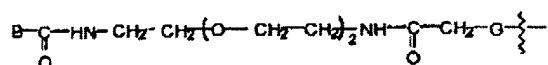
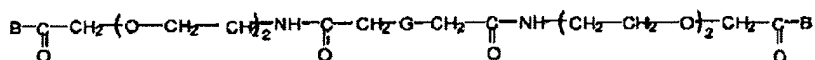
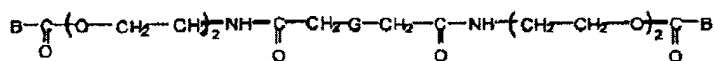
22. (Original) A compound of claim 3, selected from the group consisting of:



23. (Original) A compound of claim 1, selected from the group consisting of:

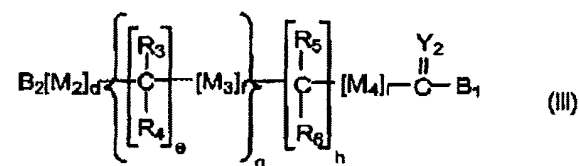


24. (Original) A compound of claim 3, selected from the group consisting of:



25. (Currently amended) A method of preparing a polymeric conjugate, comprising:

- a) reacting a biologically active moiety having an unprotected amine or
- b) hydroxyl group with a compound of the formula



wherein

B_1 is a leaving group capable of reacting with an unprotected amine or hydroxyl group;

B_2 is a cleavable protecting group;

Y_2 is O, S, or NR_9 ;

M_2 - M_3 are independently O, S, or NR_{10} ,

M_4 is X or Q;

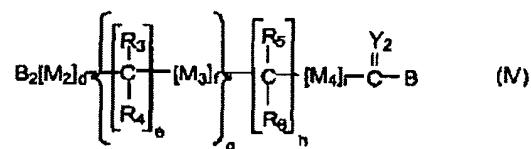
wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from $C(=Y_2)$;

R_{3-6} , R_9 and R_{10} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls and substituted C_{1-6} heteroalkyls;

d , $[e, f, g]$, h , and i are each independently zero or a positive integer; and

e , f and g are each independently a positive integer

to form a protected intermediate of the formula:

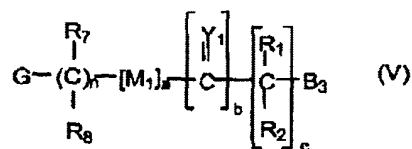


wherein

B is a residue of an amine-containing moiety or a residue of a hydroxyl-containing moiety;

- b) deprotecting the resultant intermediate by removing B_2 ; and

c) reacting the deprotected intermediate with a compound of the formula



wherein

B₃ is a leaving group;

G is a polymer residue;

Y₁ is O, S, or NR₉;

M₁ is O, S, or NR₁₀;

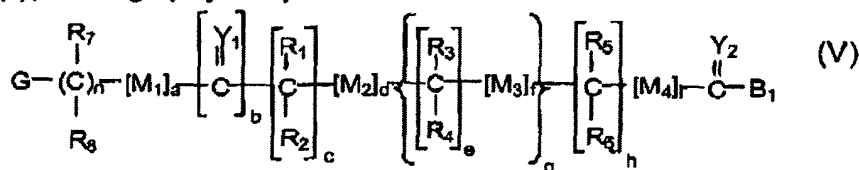
R₁, R₂, R₇, R₈ and R₁₀ are independently selected from the group consisting of hydrogen, C₁₋₆ alkyls, C₃₋₁₂ branched alkyls, C₃₋₈ cycloalkyls, C₁₋₆ substituted alkyls, C₃₋₈ substituted cycloalkyls, aryls, substituted aryls, aralkyls, C₁₋₆ heteroalkyls and substituted C₁₋₆ heteroalkyls; and

a, b and c are each independently zero or a positive integer,

whereby a polymeric conjugate is formed.

26. (Currently Amended) A method of preparing a polymeric conjugate, comprising:

[a)] reacting a polymer-spacer intermediate of the formula



wherein

B₁ is a leaving group capable of reacting with an unprotected amine or hydroxyl group;

G is a polymer residue;

Y₁ and Y₂ are independently O, S, or NR₉;

M₁-M₃ are independently O, S, or NR₁₀;

M₄ is X or Q;

wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from C(=Y₂);

B is a residue of an amine-containing moiety or a residue of a hydroxyl-containing moiety;

R_{1-10} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls and substituted C_{1-6} heteroalkyls;

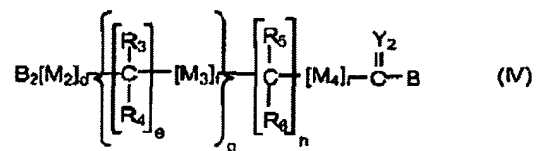
$a, b, c, d, [e, f, g], h, i$ and n are each independently zero or a positive integer; and
 e, f and g are each independently a positive integer;

and thereafter reacting intermediate with a biologically active moiety having an unprotected amine or hydroxyl group to form the polymeric conjugate.

27. (Original) A method of treatment, comprising:
 administering to a mammal in need of such treatment an effective amount of a compound of claim 1, wherein B is a residue of a biologically active moiety.

28. (Original) A method of treatment, comprising:
 administering to a mammal in need of such treatment an effective amount of a compound of claim 3, wherein B is a residue of a biologically active moiety.

29. (Original) A compound of the formula:



wherein

B is a residue of an amine-containing moiety or a residue of a hydroxyl-containing moiety;

B_2 is a cleavable protecting group;

Y_2 is O, S, or NR_9 ;

M_2-M_4 are independently O, S, or NR_{10} ;

M_4 is X or Q;

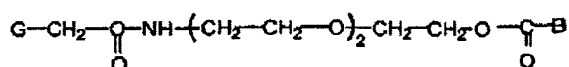
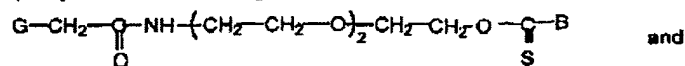
wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from $C(=Y_2)$;

R_{3-6}, g and 10 are independently selected from the group consisting of hydrogen, C_{1-6} alkyls,

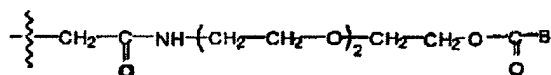
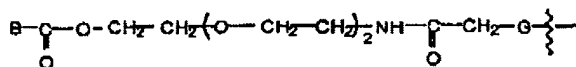
C₃₋₁₂ branched alkyls, C₃₋₈ cycloalkyls, C₁₋₆ substituted alkyls, C₃₋₈ substituted cycloalkyls, aryls, substituted aryls, aralkyls, C₁₋₆ heteroalkyls and substituted C₁₋₆ heteroalkyls;

d, *e*, *f*, *g*, *h*, and *i* are each independently zero or a positive integer.

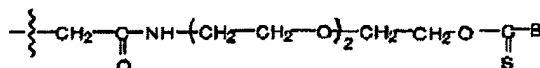
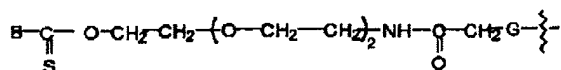
30. (Original) A compound of claim 1, selected from the group consisting of:



31. (Original) A compound of claim 3, selected from the group consisting of:



and



32. (New) The compound of claim 1, wherein *e*, *f* and *g* are each independently one or two.